

METHOD OF INDUCING DIFFERENTIATION OF DENDRITIC CELLS

ABSTRACT

The present invention is related to compounds having general formula $Z-OC(CR_{n1}R_{n2})-CO-Z$ wherein $Z = OH$ or NH_2 and $n1 = n2 = 1$ to 8 , useful for modulation of immune response by inducing differentiation of dendritic cells consisting novel class of amino acid derivatives (sulfonic acid / sulfate derivatives of naturally occurring amino acids, and their amides) of the general formula $ZOC-CR_3R_4-CR_2(NHR_1)-COOH$, $ZOC-CR_5R_6-CR_3R_4-CR_1(NHR_2)-COOH$, $ZOC-CR_7R_8-CR_5R_6-CR_3R_4-CR_1(NHR_2)-COOH$ wherein $Z=OH$ or NH_2 ; R_1 to R_8 denotes H , SO_3H , or OSO_3H . In addition, the dicarboxylic acids and their amides $ZOC-(CH_2)_n-CR_1R_2-COOH$, where $Z=OH$ or NH_2 ; and $n=1,2,3$. The groups $R_1 / R_2 = H / SO_3H$ or OSO_3H or CH_2-SO_3H or CH_2-OSO_3H and vice versa. The factors also contain different divalent metal cations such as Mg , Ca and Zn . The composition consists of varying amounts of the above amino acid / dicarboxylic acid derivatives or their pharmaceutically acceptable alkali / alkaline earth metal salts or their salts, the processes for the preparation of the aforesaid compounds useful for the differentiation and maturation of dendritic cells.